

# **Measuring What We Spend: Toward a New Consumer Expenditure Survey**

Panel on Redesigning the BLS Consumer Expenditure Surveys  
Don A. Dillman and Carol C. House, *Editors*

Committee on National Statistics  
Division of Behavioral and Social Sciences and Education

# CHAPTER 6: PATHWAY

**Recommendation 6-4:** A broader set of nonexpenditure items on the CE that are synchronized with expenditures will greatly improve the quality of data for research purposes, as well as the range of important issues that can be investigated with the data. The BLS should pay close attention to these issues in the redesign of the survey.

# CHAPTER 6: PATHWAY

**Recommendation 6-5:** A tablet computer should be utilized as a tool in supported self-administration.

However, a paper option should continue to be available for respondents who cannot or will not use a tablet computer. Visual design principles should be applied to redesigning the paper instrument in a way that improves the ease of self-administration and is aligned with the tablet modules.

# CHAPTER 6: PATHWAY

**Recommendation 6-6:** BLS should develop a preliminary roadmap for redesign of the CE within six months. This preliminary roadmap would include a prioritization of the uses of the CE, an articulation of the basic CE design alternative that is envisioned with the redesign, and a listing of decision points and highest priority research efforts that would inform those decisions.

# CHAPTER 6: PATHWAY

**Recommendation 6-7:** A critical element of any CE redesign should be the use of incentives. The incentive structure should be developed, and tested, based on careful consideration of the form, value, and frequency of incentives. Serious consideration should be given to the use of differential incentives based on different levels of burden and/or differential response propensities.

# CHAPTER 6: PATHWAY

**Recommendation 6-8:** BLS should pursue a long-term research agenda that integrates new technology and administrative data sources as part of continuous process improvement. The introduction of these elements should create reductions in data collection and processing costs, measurement error, and/or the statistical variance and complexity of the CPI estimate. The agenda should address the robustness of new technology and a cost/quality/risk tradeoff of using external data.

# CHAPTER 6: PATHWAY

**Recommendation 6-9:** BLS should increase the size and capability of its research staff to be able to effectively respond to changes in the contextual landscape for conducting national surveys and maintain (or improve) the quality of survey data and estimates. Of particular importance is to facilitate ongoing development of novel survey and statistical methods, to build the capacity for newer model-assisted and model-based estimation strategies required for today's more complex survey designs and non-sampling error problems, and to build better bridges between researchers, operations staff, and experts in other organizations that face similar problems.

**Recommendation 6-10:** BLS should seek to engage outside experts and organizations with experience in combining the development of tablet computer applications along with appropriate survey methods in developing such applications.

# CHAPTER 6: PATHWAY

**Recommendation 6-11:** BLS should engage in a program of targeted research on the topics listed in this report that will inform the specific redesign of the CE.

# CHAPTER 6: PATHWAY

## Research Topics for Designs

- Use of a tablet device.
- How people keep financial records.
- Collecting data on a reduced set of 96 expenditure categories.
- Use of incentives.
- Instrument development.
- Privacy vs. open access.
- Evaluate potential impact from reducing proxy reporting of expenditures.
- Experiment with imputation methods and other statistical approaches.
- Evaluate the effectiveness of using more intensive methods.

## Compatible Research

- Experiment with other technologies to record and extract data.
- Split questionnaire design.
- Evaluate the utility and the ability to obtain data from additional sources.
- Augmentation of sample with wealthy households.
- Identify and evaluate sources of auxiliary data (e.g., retailer data).

# CHAPTER 6: PATHWAY

## Research Topics for Specific Designs

### Design A

Develop models that would estimate quarterly and annual expenditures and income at the household level from the four weeks of reported detailed data plus the data reported on larger and routine expenditures.

# CHAPTER 6: PATHWAY

## Research Topics for Specific Designs

### Design B

- Investigate the assumption that a “bounding” interview is unnecessary to avoid telescoping and other issues.
- Investigate the accuracy and completeness of aggregated expenditures for periods up to six months and for estimates of averages (i.e., average monthly spending gasoline) used in this prototype to construct a full set of microdata for the entire six-month period.
- Develop appropriate models to “disaggregate” aggregated expenses using data from the one-week supported journal.
- Develop methodology for a successful component that will use an intensive interview and process based on prior collation of records and financial software to achieve a budget balance for the year at the household level as described below. Extend existing research done by Fricker, Kopp, and To (2011) to fully evaluate its potential and limitations.

# CHAPTER 6: PATHWAY

## Research Topics for Specific Designs

### Design C

- Research and develop models for estimation using the base survey and two components of data collection.
- Research and develop models for imputing at the household level “smaller expense items” collected on the *Detailed Expenditure Component* and not on the *Household Profile Component* into the household-level dataset to complete the overall household expense profile.

# CHAPTER 6: PATHWAY

**Recommendation 6-12:** BLS should fund a “methods panel” (a sample of at least 500 households) as part of the CE base, which can be used for continued testing of methods and technologies. Thus the CE is never again in the position of maintaining a static design with evidence of decreasing quality for 40 years.